COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

Re:	Petition of Franklin W. Olin College Of Engineering)	DTE 01-95
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TESTIMONY OF RICHARD F. JOYCE, WELLESLEY MUNICIPAL LIGHT PLANT

- Q. Please state your name and address.
- A. My name is Richard Joyce and my business address is Wellesley Municipal Light Plant, 455 Worcester Street, Wellesley, Massachusetts ("WMLP").
- Q. What is your position at WMLP?
- A. I am the Director of WMLP. I have been the Director of WMLP since March 1995.
- Q. Please describe your employment background prior to becoming the Director at WMLP.
- A. I was employed as the Controller for Vermont Electric Cooperative and Vermont Electric Generation & Transmission Cooperative In that position, I was responsible for customer service, accounting, finance, purchasing and the network information system. Prior to that time, I was employed at the Public Service Company of New Hampshire ("PSNH"), where I was the Assistant Treasurer. In that position, I was responsible for bondholder/stockholder relations, pension plan and cash management
- Q. What are your responsibilities as Director/Manager of WMLP?
- A. As the Director/Manager of WMLP, pursuant to G.L. c. 164, § 56, I have full responsibility for operation and management of the plant, the distribution of electricity, all matters involving the supply of electricity including the method, time, price quantity and quality of the supply of electricity, the collection of bills, the keeping of accounts, the purchase of supplies, the hiring of employees, consultants, attorneys and other agents of the light plant.

Q. Please provide a brief description of WMLP.

A. WMLP is a municipal light plant organized under the provisions of M.G.L. c. 164. WMLP was established in 1892 and provides retail electric service to customers in the Town of Wellesley and portions of Needham, Natick and Weston. The WMLP is governed by a Board of Commissioners, which is comprised of five (5) members, three (3) of which are elected and two (2) of which are appointed by the Board of Selectmen. I report to the Board of Commissioners.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe WMLP's provision of electric service to the portion of the Town of Needham, including but not limited to providing electric service to Babson College (or "Babson"). I also will explain how WMLP has provided electric service to the portion of the Babson College campus which is now owned by Franklin W. Olin College of Engineering ("Olin College" or "Olin") and which is described in more detail in the Olin College Petition before the Department of Telecommunications and Energy ("Department" or "DTE"). Finally, I will describe how WMLP will provide electric service to Olin College if authorized to do so by order of the Department.

Q. Please describe WMLP's provision of electric service to Babson College.

A. Babson College has been a customer of WMLP for more than 80 years. Babson's campus is located in the Towns of Wellesley and Needham. The WMLP has continuously provided electric service to Babson since 1920. As Babson College has expanded over the years, WMLP has provided additional service to Babson.

WMLP serves Babson College through Babson's switchgear, which is located on a portion of the Babson campus in the Town of Wellesley. Babson distributes electricity to its facilities in Wellesley and Needham using its own distribution system.

- Q. Are you familiar with the location of the Olin College campus as set forth in Olin's Petition to the Department?
- A. Yes, I am.

499753_2 2

Q. What is your understanding of the location?

A. The Olin College property that is before the Department in this case is located on a portion of the former Babson College campus, which is the same area that WMLP has provided service to for decades. As I understand, Babson College deeded over this piece of its property to Olin College as part of a joint collaborative arrangement.

Q. Has WMLP ever provided electric service to the specific Needham property in question?

A. For the better part of 50 years the physical interconnection to this area has been delivered to a central distribution point on the Babson College campus and then distributed to college-owned buildings and facilities. The same electric service that was once referred to as the Babson Campus is now referred to as the Olin Campus. Nothing has changed except the name. In fact, in some instances not even the name will change as several future buildings on the Olin Campus will be co-owned by Babson College. WMLP has historically provided the electric service for parking lots, streetlights and 2 or 3 large buildings in Needham. The parking lot area is on the Olin College property that is currently before the Department. WMLP has provided electric service to this parking lot for decades. This parking lot is directly adjacent to Babson and Olin buildings and is used by both institutions.

Q. To your knowledge, has Boston Edison ever provided service to this particular area?

A. No. In fact, in its responses to WMLP's second set of Information Requests, Boston Edison acknowledged that it has not.

Q. Do you know when the parking lot lights, which are now part of the Olin College campus, were erected?

A. Certainly these parking lot lights existed before 1997. I believe thee lights now located on the Olin College campus were erected in the 1960's or 1970's.

Q. In your opinion, is the property set forth in Olin College's Petition part of WMLP's service territory?

A. Yes it is.

Q. What is the basis for your opinion?

A. WMLP has always provided electric service to Babson College both in Wellesley and Needham and as previously discussed, WMLP has provided service to the specific area set forth in Olin College's Petition. Nothing has changed. In fact, if Babson College expanded its own campus onto the property on which the Olin College property before the Department is located, there would be no service territory issue before the Department. It is clear that the new buildings and facilities would be in WMLP's service territory. There still would not be any issue if Babson College constructed the buildings and facilities and later sold them to Olin College because service territories are not determined on the basis of who owns the property but rather on the basis of which company has served the property in question. In fact, it has recently been brought to our attention that two or more buildings that will be located on the Olin Campus will actually be jointly owned by both Olin and Babson College.

Q. During the construction of Olin College, has WMLP metered electric service to Olin College?

A. No it has not. Olin College is not yet a customer of WMLP; therefore WMLP has not issued a bill to Olin College or installed a meter to separately identify Olin's usage.

Q. How is Olin College being served during construction?

A. Olin has been receiving electric service on a temporary basis for its Needham campus in some combination directly from Babson and indirectly from WMLP. For the better part of a half-century the WMLP and Babson infrastructures have combined to deliver electric service to this area of Neehdam.

Q. Has WMLP provided electric service to other portions of Needham?

A. Yes.

Q. When did WMLP first begin providing service to Needham?

A. The WMLP first began providing electricity to Needham in 1918.

499753_2 4

Q. Please describe areas in Needham that WMLP provides service.

A. WMLP provides service to a development on Cartright Road in Needham. NSTAR did not want to provide service to those properties. In December 1987, in D.P.U. 86-45/D.P.U. 86-144 the Department ordered WMLP to provide electric service to the development based in part on WMLP's "historic" practice of providing service to that area. This situation is comparable to Olin College because WMLP has a historic practice of providing service to the subject property.

The WMLP also serves Massachusetts Water Resources Authority ("MWRA") property in Needham. WMLP began serving the MWRA property in August 2001. NSTAR requested WMLP to provide service to the MWRA property. A copy of NSTAR's Request was included in the WMLP's response to Information Request BE4-4. NSTAR's request was based on four factors.

- a. NSTAR did not have distribution wires to this particular Needham location. In the case of Olin College existing electric service was so close that some electrical structures "... had to be relocated to facilitate construction of Olin's new campus" (reference Hannabury 2/20/02 Affidavit).
- b. Customer's line extension costs were not warranted when WMLP distribution lines were closer. As stated in Mr. Hannabury's affidavit, "Although some expenditures would be required for making the connection with WMLP, the total capital cost of providing service to the new campus area from NSTAR at the level of service both required by Olin and available from WMLP is in the range of \$1,140,000 greater than from WMLP, assuming NSTAR gives full credit. Without such credit, just the capital costs of connecting to NSTAR will approximate \$1,740,000 greater than connecting to WMLP." Hannabury Affidavit, p. 4.

The WMLP already has existing three-phase service to a central distribution point on the Babson Campus. If Olin and Babson utilize a single switchgear at the central distribution point existing WMLP lines are more than adequate to serve Olin.

- c. WMLP's willingness to provide distribution service to this site. This also is the cure for Olin. WMLP is ready, willing and able to serve the Olin campus in Needham. WMLP has existing lines and equipment already installed as a result of providing electric service to Babson's Wellesley and Needham campus for more than 80 years. WMLP is able to provide the quality of electric service required by Olin. In fact, WMLP has not experienced an outage in this service area for at least 7 years.
- d. Anticipated revenues did not warrant NSTAR's investment;

WMLP also provides distribution service to NSTAR so that NSTAR can serve the Grove Street area development in Needham. This service was part of a recent Department case brought by a developer building homes in Needham. In addition to the Babson/Olin College facilities, and the Cartwright Road and MWRA accounts, the WMLP currently provides electric service to Needham residents located on Cornell Road, Lehigh Road and Grove Street.

Q. Are there any other similarities between WMLP's service to the MWRA and to Olin?

A. Yes, there are. Both are located in Needham and both have requested service from the WMLP. Both entities place a high priority on receiving highly reliable electric service.

Q. What steps have the WMLP taken to improve its system reliability?

A. The WMLP places the highest level of importance on providing reliable electric service to its customers. Although municipal electric utilities are not directly regulated by the DTE for ratemaking purposes, the WMLP received the DTE's message loud and clear with respect to the importance of reliability and the future implementation of *Performance Based Rates*. Since the DTE first advocated this concept the WMLP accelerated its capital work plan making reliability its number one priority. Since 1997 the WMLP had been utilizing its cash reserves to fund an extremely aggressive capital plan. Because WMLP rates are among the lowest in Massachusetts and the WMLP has placed a great deal of importance in compliance with the DTE's stated priority of providing reliable electric service, the WMLP scaled back on its rate freeze.

The WMLP's capital investment and emphasis on reliability was highlighted in LaCapra Associates January 1999 independent report to the Municipal Light Board which noted "... This continually improving reliability can be traced to the Light Plant's aggressive capital work plan."

A redacted copy of this report was provided in response to BECo's Information Request BE-4-8.

Q. If the Department allows Olin College to take service from WMLP, how will WMLP provide such service?

A. As of this date, two alternative routes are being evaluated for permanent service to Olin College. These two alternatives are:

- ?? Providing electric service to both Babson College and Olin College through a single lineup of switchgear to be located on the Babson campus, at a location in Wellesley through which WMLP has served for decades. Both Babson College and Olin College would be separately metered customers of WMLP under this arrangement. As I understand, Olin College will have ownership interests in the switchgear, electric lines out of the switchgear, with the associated land rights.
- ?? Providing electric service to Olin College through switchgear to be located on a piece of land owned by Olin College in Wellesley.

It appears at this time that serving both loads through a single lineup of switchgear located on the Babson Campus is the preferred alternative.

Once it is determined which supply alternative best suits the needs of the respective institutions, the final easement and other land use rights which WMLP may require to fulfill this alternative will be established and legally executed.

Q: What are the advantages of serving Olin through the continued use of central switchgear with Babson?

A. There are numerous advantages. The primary benefit to both Olin and the WMLP is that the WMLP's distribution infrastructure is already in place. A second major advantage is that the Babson Campus is currently served from two separate substations, each capable of servicing the entire campus during a single order contingency. A third advantage is that the primary supply is a dedicated underground cable supply that feeds only Babson, which eliminates exposure to problems inherent with supplies fed from overhead pole lines, such as vehicular accidents and weather conditions (i.e. hurricanes, ice storms, etc.)

Reliability of supply is greatly enhanced because those two supplies come from completely different substations; one from the Wellesley Hills Substation and the backup from the Cedar Street Substation. Upon the occurrence of any type of major substation problem in the Wellesley Hills Substation, both the Babson and Olin campuses will switch to a separate substation.

Q. Are there operational benefits which result from having Babson College involved in the operation of the supply to Olin College through the central switchgear concept?

It is my understanding that under the Olin and Babson <u>Joint Collaborative</u> <u>Agreement</u>, Babson College will be responsible for the maintenance and operations of the electrical infrastructure. For decades Babson College and WMLP have worked very closely together and established an extremely effective

499753_2 7

working relationship in meeting all of the College's electrical needs. Babson College owns and operates its own high voltage electrical system. Babson College has a staff of highly seasoned professionals who have experience in troubleshooting and repairing system problems working hand-in-hand with WMLP. Olin would automatically receive all of the benefits that accompany this relationship since a central switchgear arrangement will streamline troubleshooting requirements in the event of system problems.

Q. Are there any other reasons why WMLP believes the central switchgear concept to supply both Babson College and Olin College makes sense?

A. In addition to the financial, operational and reliability benefits, the campus' electrical infrastructure from a single central distribution point is already in place. This central distribution point has in the past and currently services the area of Needham where Olin's buildings are now being constructed. This infrastructure includes existing service to the area in Needham where Olin's buildings are currently being constructed.

Through this central distribution point, WMLP has historically provided electrical service to the Babson College Sullivan Building and Maintenance Shed, both of which are physically located in Needham, as well as to lighting for a parking lot in Needham located adjacent to the Olin campus.

Finally, it is WMLP's understanding that the Babson College Master Plan includes construction of two buildings on the Olin Campus which would be jointly owned by both Babson College and Olin College and would be fed from the central switchgear location.

Q. Are there any reliability issues with WMLP providing service to this area?

A. No. WMLP is capable of providing reliable service to Olin College. In fact, there have been no power outages to this service area for at least the past 7 years.

Q. Does Boston Edison have reliability issues in serving this area of Needham?

A. Yes, Boston Edison has voltage problems in this area of Needham. The WMLP receives approximately one-third of its power supply from BECo's Needham Substation 148. This is the same substation that will provide the power for Olin College should the DTE rule against Olin and the WMLP.

The Needham Substation transformers were installed in the late 1950's or early 1960's. The voltage from these transformers is not automatically regulated. During the hot summer days BECo's substation transformers are incapable of providing voltage within acceptable ANSI Standards. According to these

standards, the WMLP should receive voltage at ±5% of 13.8 kV. The minimal acceptable level would be 13.1 kV. Since 1996 the WMLP has received voltages at 12.6 kV and below. During 2 out of the last 3 summers the voltage from Needham was so low that Wellesley College relays tripped, automatically shutting down their cogeneration facilities. Given the extremely poor 5-year record of voltage and reliability problems at Station 148 the additional load required to serve Olin College could create significant problems for Needham and Wellesley businesses and residents.

Q. Will these same voltage problems exist if WMLP is the power supplier to Olin College?

A. No. The primary power supply from the WMLP would come from BECo's Newton Station 292's voltage regulated transformers. This power supply is completely underground located in a new WMLP-owned duct bank and manhole system constructed in 2000 and 2001.

Q. What will be the rate for service for Olin College?

A. WMLP will provide service under its <u>Large General Service - Primary</u> rate tariff. As discussed in WMLP's response to BE 4-8,WMLP believes that its rates are very competitive and economical.

Q. Will WMLP abide by a final Order in this case?

A. Yes. I can assure the Department that WMLP will abide by the final Order issued for this case.

O. Does this conclude your testimony?

A. Yes it does.